

LTC1625IGN#PBF

Data Sheet

LINEAR TECHNOLOGY LTC1625IGN#PBF DC-DC Controller, Current Mode, 3.7V to 36V, 1 Output, Synchronous Buck, 165kHz, SSOP-16

Manufacturers <u>Analog Devices, Inc</u>

Package/Case MSOP16

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LTC1625IGN#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC1625 is a synchronous step-down switching regulator controller that drives external N-Channel power MOSFETs using few external components. Current mode control with MOSFET VDS sensing eliminates the need for a sense resistor and improves efficiency. The frequency of a nominal 150kHz internal oscillator can be synchronized to an external clock over a 1.5:1 frequency range.

Burst ModeTM operation at low load currents reduces switching losses and low dropout operation extends operating time in battery-powered systems. A forced continuous mode control pin can assist secondary winding regulation by disabling Burst Mode operation when the main output is lightly loaded.

Fault protection is provided by foldback current limiting and an output overvoltage comparator. An external capacitor attached to the RUN/SS pin provides soft start capability for supply sequencing. A wide supply range allows operation from 3.7V (3.9V for LTC1625I) to 36V at the input and 1.19V to VIN at the output.

Features

Highest Efficiency Current Mode Controller

No Sense Resistor Required

Stable High Current Operation

Dual N-Channel MOSFET Synchronous Drive

Wide VIN Range: 3.7V to 36V

Wide VOUT Range: 1.19V to VIN

Programmable Fixed Frequency with Injection Lock

Very Low Drop Out Operation: 99% Duty Cycle

Forced Continuous Mode Control Pin

Optional Programmable Soft Start

Pin Selectable Output Voltage

Foldback Current Limit

Output Overvoltage Protection

Logic Controlled Micropower Shutdown: IQ < 30 µA

Available in 16-Lead Narrow SSOP and SO Packages

Application

Notebook and Palmtop Computers, PDAs

Cellular Telephones and Wireless Modems

Battery Chargers

Distributed Power

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN